

COMP3111: Introduction to Software Engineering

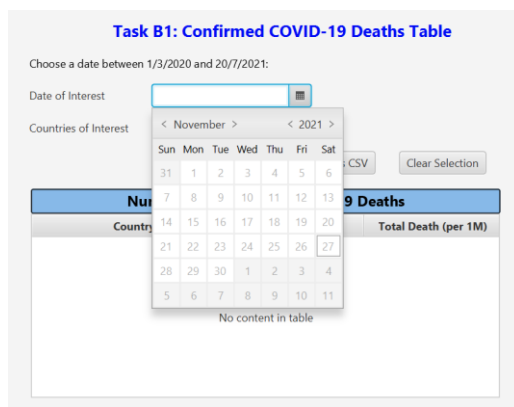
Supplementary Notes of Amazing Team 26

Salient & Commendable Features

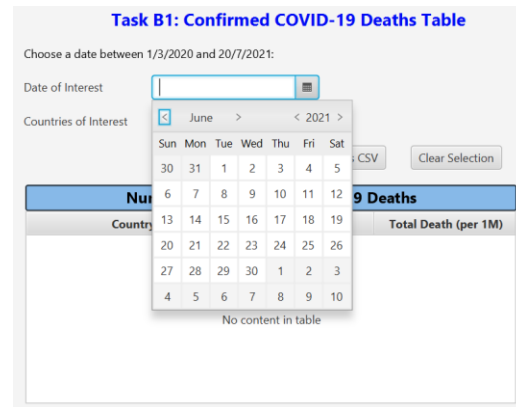
(To avoid repetition and for representation purposes, our team has chosen Task B1/B2 to show salient characteristics in our project since all the tasks A, B, and C follow the same structure and implementation.)

- **DatePicker:**

We implemented "datepicker" for inputting data, a calendar view would be shown for users to pick a date. Date blocks are also added on our datepicker to avoid users from selecting dates that are out of range. For example, dates before 1/3/2020 and after 20/7/2021 will be grayed out on the datepicker. **(Further Date Range limitation feature for starting and ending dates highlighted under Chart Generating Tasks – Task A2/B2/C2 Section below)**



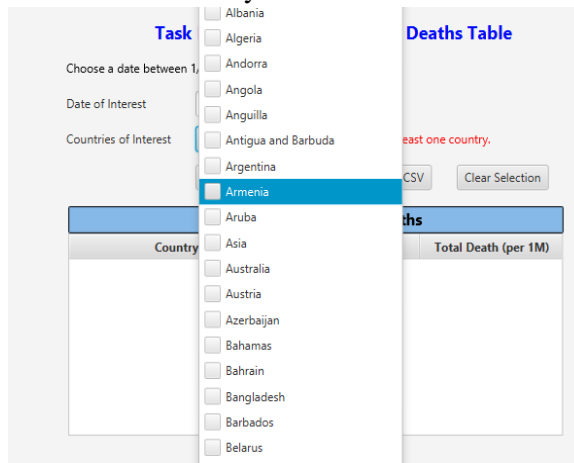
(Photo 1: dates out of range are grayed out)



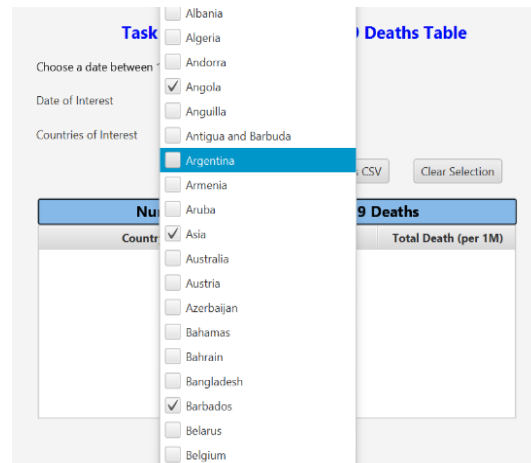
(Photo 2: dates within the range can be selected)

- **Drop-Down Menu:**

A drop-down menu is implemented for users to select from a list of countries. They can choose more than one country.



(Photo 3: all countries listed in dropdown list)



(Photo 4: multiple countries selected)

- **Download CSV File:**

After making valid inputs (e.g. date, countries), the software will generate a CSV file with the corresponding data when the user clicks the button "Download Data as CSV". The file contains countries, dates, and their corresponding data. The file will be opened immediately once the button is clicked and is stored on your respective git folder on your PC.

	A	B	C
1	Country	Total Deaths	Total Deaths (per 1M)
2	Hong Kong	212	28.278
3	India	418480	303.245
4	Japan	15026	118.805
5			
6			

(Photo 5: downloaded as CSV for task B1)

	A	B	C	D	E
1	Country	Date	Cumulative Deaths (per 1M)		
2	Antigua and Barbuda	5/6/2021	326.771		
3	Antigua and Barbuda	5/7/2021	326.771		
4	Antigua and Barbuda	5/8/2021	326.771		
5	Antigua and Barbuda	5/9/2021	326.771		
6	Antigua and Barbuda	5/10/2021	326.771		
7	Antigua and Barbuda	5/11/2021	326.771		
8	Antigua and Barbuda	5/12/2021	326.771		
9	Antigua and Barbuda	5/13/2021	326.771		
10	Antigua and Barbuda	5/14/2021	326.771		
11	Antigua and Barbuda	5/15/2021	336.982		
12	Antigua and Barbuda	5/16/2021	336.982		
13	Antigua and Barbuda	5/17/2021	428.887		
14	Antigua and Barbuda	5/18/2021	428.887		

(Photo 6: downloaded as CSV for task B2)

- **Clear Selection:**

Users can click on the "Clear Selection" button, in which it resets the datepicker(s) and country selections. If a table/ chart was already generated on the pane, clicking the "Clear Selection" button also removes the date in the table/ chart from the pane. (Demonstration video:

<https://youtu.be/ZnxeG3cfXeU>)

- **Handling Missing Data:**

If the selected country has missing data within the selected date(s), messages will be displayed in the table/beneath the chart to notify user. For downloaded CSV files, the data cell will display "NA" if no data is available.

Task B1: Confirmed COVID-19 Deaths Table

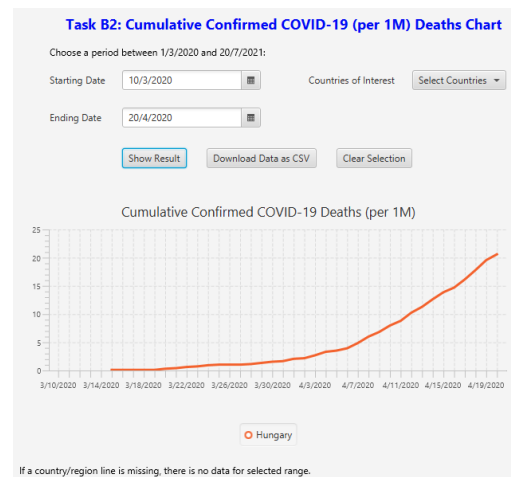
Choose a date between 1/3/2020 and 20/7/2021:

Date of Interest:

Countries of Interest:

Number of Confirmed COVID-19 Deaths as of 20/7/2021		
Country	Total Deaths	Total Death (per 1M)
India	418480	303.245
Jersey	NA	NA

(Photo 7: "NA" displayed if no data available for that country on that date)



(Photo 8: Message displayed beneath chart if some data is not available for that country on some days within the selected range)

Table Generating Tasks – Task A1/B1/C1

(To avoid repetition and for representation purposes, our team has chosen Task B1 to show salient characteristics in our project since all the tasks A, B, and C follow the same structure and implementation.)


Demonstration video: <https://youtu.be/hYvLt8-Trdc>

UI:

Task B1: Confirmed COVID-19 Deaths Table

Choose a date between 1/3/2020 and 20/7/2021:

Date of Interest 

Countries of Interest 

Number of Confirmed COVID-19 Deaths		
Country	Total Deaths	Total Death (per 1M)
No content in table		

Validation:

- Date input:**

When users click on the “Show Result” button without selecting a date using the datepicker, error message “Please pick a date between 3/1/2020 and 20/7/2021.” will be displayed.

Task B1: Confirmed COVID-19 Deaths Table

Choose a date between 1/3/2020 and 20/7/2021:

Date of Interest  Please pick a date between 1/3/2020 and 20/7/2021.

Countries of Interest 

Number of Confirmed COVID-19 Deaths		
Country	Total Deaths	Total Death (per 1M)
No content in table		

(Photo 7: user has selected at least one country but has not selected a date)

- **Country input:**

When users click on the “Show Result” button without selecting at least one country from the dropdown list, error message “Please pick at least one country.” will be displayed.

Task B1: Confirmed COVID-19 Deaths Table

Choose a date between 1/3/2020 and 20/7/2021:

Date of Interest

Countries of Interest Please pick at least one country.

Number of Confirmed COVID-19 Deaths		
Country	Total Deaths	Total Death (per 1M)
No content in table		

(Photo 8: user has selected a date but has not selected at least one country)

- **Multiple Validation Checks**

Since there are multiple permutations of invalid/missing inputs, our program is also able to handle multiple validation checks at the same time for both the table generation and download features. Please feel free to run and test it.

Chart Generating Tasks – Task A2/B2/C2

(To avoid repetition and for representation purposes, our team has chosen Task B2 to show salient characteristics in our project since all the tasks A, B, and C follow the same structure and implementation.)

Demonstration Video: <https://youtu.be/SIOqAxOFEKOM>

UI:

Task B2: Cumulative Confirmed COVID-19 (per 1M) Deaths Chart

Choose a period between 1/3/2020 and 20/7/2021:

Starting Date

Ending Date

Countries of Interest

Additional feature – Date range limitation:

Date blocks are added so that user won't be able to select an ending date that's before the starting date. When user has selected a starting date, we will block all dates before the selected starting date in the ending date datepicker. Vice versa when user has selected an ending date, we will block all dates after the ending date in the starting date datepicker.

Task B2: Cumulative Confirmed COVID-19 (per 1M) Deaths Chart

Choose a period between 1/3/2020 and 20/7/2021:

Starting Date: 1/6/2021

Countries of Interest:

Ending Date:

Calendar view for May 2021:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

(Photo 9: user has selected 1/6/2021 as starting date so all dates before that are grayed out and blocked in the ending date datepicker)

Task B2: Cumulative Confirmed COVID-19 (per 1M) Deaths Chart

Choose a period between 1/3/2020 and 20/7/2021:

Starting Date:

Countries of Interest:

Ending Date: 1/6/2021

Calendar view for June 2021:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

(Photo 10: user has selected 1/6/2021 as ending date so all dates after that are grayed out and blocked in the starting date datepicker)

Validation:

- Starting date input:**

When users click on the “Show Result” button without selecting a starting date using the datepicker, error message “Please pick a date between 3/1/2020 and 20/7/2021.” Will be displayed.

Task B2: Cumulative Confirmed COVID-19 (per 1M) Deaths Chart

Choose a period between 1/3/2020 and 20/7/2021:

Starting Date:

Countries of Interest:

Ending Date: 7/7/2021

Please pick a date between 1/3/2020 and 20/7/2021.

(Photo 11: user has selected at least one country and the ending date but has not selected a starting date)

- **Ending date input:**

When users click on the “Show Result” button without selecting an ending date using the datepicker, error message “Please pick a date between 1/3/2020 and 20/7/2021.” Will be displayed.

(Photo 12: user has selected at least one country and the starting date but has not selected an ending date)

- **Country input:**

When users click on the “Show Result” button without selecting at least one country from the dropdown list, error message “Please pick at least one country.” Will be displayed.

(Photo 13: user has selected a starting and ending date but has not selected at least one country)

- **Multiple Validation Checks**

Since there are multiple permutations of invalid/missing inputs, our program is also able to handle multiple validation checks at the same time for both the chart generation and download features. Please feel free to run and test it.